

Free Tax Services in Pediatric Clinics

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abstract

OBJECTIVES: The earned income tax credit (EITC), refundable monies for America's working poor, is associated with improved child health. Yet, 20% of eligible families do not receive it. We provided free tax preparation services in clinics serving low-income families and assessed use, financial impact, and accuracy.

METHODS: Free tax preparation services ("StreetCred") were available at 4 clinics in Boston in 2016 and 2017. We surveyed a convenience sample of clients ($n = 244$) about experiences with StreetCred and previous tax services and of nonparticipants ($n = 100$; 69% response rate) and clinic staff ($n = 41$; 48% response rate) about acceptability and feasibility.

RESULTS: A total of 753 clients received \$1 619 650 in federal tax refunds. StreetCred was associated with significant improvement in tax filing rates. Of surveyed clients, 21% were new filers, 47% were new users of free tax preparation, 14% reported new receipt of the EITC, and 21% reported new knowledge of the EITC. StreetCred had high client acceptability; 96% would use StreetCred again. Families with children were significantly more likely to report StreetCred made them feel more connected to their doctor ($P = .02$). Clinic staff viewed the program favorably (97% approval).

CONCLUSIONS: Free tax services in urban clinics are a promising, feasible financial intervention to increase tax filing and refunds, save fees, and link clients to the EITC. With future studies, we will assess scalability and measure impact on health. StreetCred offers an innovative approach to improving child health in primary care settings through a financial intervention.



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WHAT'S KNOWN ON THIS SUBJECT: Poverty is detrimental to child health. The earned income tax credit can be used to reduce poverty but is underused. Twenty percent of families who could receive it do not, and \$2 billion annually is lost to for-profit tax preparers.

WHAT THIS STUDY ADDS: Free tax services in clinics maximize tax filing and refunds, are feasible, and are acceptable to families and clinic staff. This intervention is scalable given the prevalence of catchment clinics, dedicated staff, and community-based Volunteer Income Tax Assistance organizations.

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One in 5 children in the United States lives in poverty, increasing risk of delayed development, disease, poor educational outcomes, and decreased economic productivity for 16 million children.^{1,2} Reducing poverty is crucial to improving US child health, yet poverty rates have plateaued since the Great Recession.³ The earned income tax credit (EITC), an antipoverty, prowork, federal refundable credit is a powerful tool; in 2015, coupled with the child tax credit, it reduced or eliminated poverty for 13.2 million children.⁴ Eligibility for EITC is dependent on age, filing status, social security number status, employment income, and the number of qualifying children.

However, 20% of eligible households do not claim this tax credit.⁵ In addition, individuals who receive EITC lose \$1.75 billion to for-profit tax preparers yearly, despite eligibility for free tax preparation.⁶ EITC recipients pay 13% to 22% of their credit for these services. Although free tax sites exist in most communities via Volunteer Income Tax Assistance (VITA), they often have limited hours, capacity, and accessibility. Moreover, for-profit preparers target poor families; low-income neighborhoods have 75% more for-profit preparers than affluent ones.⁶

The EITC is associated with health and economic benefits, including decreased maternal smoking and infant mortality, improved maternal mental health, increased food security, birth weight, term births, breastfeeding, employment rates of single mothers, child educational achievement, and long-term earnings when children become adults.^{7–20} The American Academy of Pediatrics has committed to “eliminating child poverty.”²¹ Because the EITC is a preexisting program used to reduce childhood poverty, maximizing its use is essential.

Consequently, an urgent need exists to connect families to accessible, acceptable free tax preparation. Pediatricians are uniquely-positioned, trusted professionals interacting regularly with low-income families; >90% of children <2 years old see a doctor yearly.²² In response, we developed StreetCred, which we use to offer free tax preparation integrated into the medical home. To our knowledge, this is a novel approach; some tax sites colocate with health clinics, but none are integrated. We aim to decrease financial stress and maximize tax refunds, particularly EITC, among low-income families.

We piloted StreetCred in New England’s largest safety net hospital and 3 community clinics to test our hypothesis, as follows: integrating free tax preparation into clinics serving children (1) ensures families file taxes and receive accurate tax preparation maximizing tax credits and refunds, (2) is feasible in medical clinics, and (3) is acceptable to families and clinic staff.

METHODS

Program Implementation

In 2016, we implemented StreetCred in Boston Medical Center’s (BMC) pediatric clinic. Services were available to all families with taxable income. In 2017, we expanded to South End Community Health Center, Martha Eliot Health Center, and a community clinic within the Boston Health Care for the Homeless Program.

We advertised via physician referrals, fliers in mailed appointment reminders, clinic advertisements, and calls to families with upcoming appointments. Although our target population was families with children, we also used StreetCred to serve low-income hospital or clinic employees and adults without children, including patients

from other clinical areas in the hospital or clinic who encountered our advertising and individuals referred from other tax preparation sites within the Boston Tax Help Coalition because of wait times or convenience. We used privacy screens and Health Insurance Portability and Accountability Act-compliant procedures. We operated January to April 2016 and 2017 with concurrent client recruitment. To balance accessibility with feasibility, we offered services 15 to 25 hours weekly, including evenings and weekends.

Walk-in visits and appointments, in conjunction with a medical appointment or other convenient time, were available. During scheduling, families learned about required tax documents (eg, identification, wage and tax statements, etc). If scheduled with a medical appointment, families arrived 15 minutes early to complete intake, went to their appointment while taxes were prepared, and returned to finalize their return after the visit.

Within each site, predominately minority, low-income, and Medicaid-insured patients are served; many patients are non-English speaking. We advertised in English, Spanish, and Haitian Creole. Interpreter services were available. Some tax preparers were bilingual.

The Boston Tax Help Coalition, an umbrella organization used to coordinate Boston’s VITA program, was used to train volunteer tax preparers. A VITA-certified site coordinator supervised volunteers and managed logistics. The program cost \$8000–\$10 000 per site, largely in site coordinator salaries (based on VITA norms). Partner sites covered this cost and provided in-kind resources (space, computers, etc). Grants, corporate donations, and private philanthropy covered central programming costs (1 full-time staff salary, marketing materials).

Study Design and Participants

We conducted surveys to assess the intervention's feasibility, acceptability, and impact among (1) StreetCred clients, (2) nonparticipating clinic families, and (3) clinic staff (Supplemental Fig 1).

Among clients, we surveyed a convenience sample to assess experiences with StreetCred and previous tax preparation. We pretested this survey via a needs assessment in 2015. Participants completed this anonymous, written survey immediately after completing the tax return. Surveys were in English, Haitian Creole, Spanish, and Portuguese. In 2016, research volunteers asked clients to complete the survey and offered a raffle incentive; in 2017, to increase survey availability, tax preparers asked clients to complete the survey when time permitted without an incentive.

We conducted a phone survey in 2016 with nonparticipating BMC pediatric clinic families to assess perceptions of StreetCred. This 3-question survey was multiple choice and free response. Research volunteers called families with upcoming appointments and offered StreetCred's service; if they declined, volunteers asked families to complete a survey. Volunteers used interpreter services for non-English-speaking families and offered clients a raffle entry after survey completion.

Additionally, we e-mailed anonymous English-language surveys, which contained 5 multiple choice and 3 free response questions, to all BMC pediatric clinic staff in 2016 to assess perceptions of and experiences with StreetCred. Deidentified data regarding total tax return and EITC amount were available for all clients via Internal Revenue Service-provided tax software (TaxWise in 2016; TaxSlayer in 2017). Because of the brevity of staff and nonparticipant surveys, we did not pretest them. Research volunteers

completed institutional review board training and followed written guides on survey administration.

Measures

Impact

Primary measures were total money refunded and EITC returned. Additional measures, relative to client's self-reported past, included percent change in clients filing taxes, receiving free tax preparation services, and knowledge and receipt of EITC.

Feasibility

Measures included the following: the percentage of tax returns completed in 1 visit, mean self-reported visit length, clinic staff's perception of StreetCred's impact on clinical workflow, nonparticipant families' reasons for declining services, and program cost.

Acceptability

Measures included the following: the clients' self-reported overall experience; percent of participants and nonparticipants interested in using StreetCred's services next year; whether using StreetCred made clients feel more connected to their doctor; whether services were timely, private, and convenient; and whether tax preparers were knowledgeable and trustworthy. Clinic staff acceptability measures included staff perception of whether StreetCred was appropriate and relevant and whether StreetCred should continue.

Statistical Analysis

We calculated descriptive statistics regarding overall client population and regarding impact, feasibility, and acceptability from the tax software and client databases and client, nonparticipant, and provider surveys, respectively. We stratified and analyzed client survey data by (1) children ≤ 18 years old, (2) site, and (3) year for BMC (the only site existing for 2 years). We examined

group differences by using Fisher's exact test, χ^2 test, or analysis of variance; 2-sided P values $< .05$ were considered significant. Data were managed in Research Electronic Data Capture and descriptive analyses were completed by using Stata (Stata Corp, College Station, TX), Microsoft Excel, and Research Electronic Data Capture. Ten percent of surveys underwent double entry to ensure minimal entry errors. The Boston University Institutional Review Board deemed this study exempt.

RESULTS

Respondents

StreetCred prepared taxes for 753 clients (186 in 2016; 567 in 2017) who were a combination of pediatric clinic families, patients from other clinical areas, hospital employees, and unaffiliated taxpayers; significant overlap existed among categories (Table 1). In total, we surveyed 254 clients, which were 34% of the total StreetCred clients; 10 surveys were excluded for missing all demographic data for a sample of 244 (42 in 2016; 202 in 2017). We called 144 nonparticipants that resulted in a sample of 100 (69% response rate). Forty-one clinic staff responded to the staff survey (48% response rate); 38 were aware of the program and could complete the survey. StreetCred client survey participants were predominantly minorities (45% black, 30% Hispanic), low-income (40% below the poverty line), single (76%), and English-speaking (73%) (Table 2). Families with children ≤ 18 years old were more likely to identify as multiracial, have a lower education level, and live below the federal poverty line than families without. Additionally, they were more likely to have heard of EITC and to report receiving EITC in the previous year (Table 2).

Pediatric-specific sites (BMC, St. Mary's Center for Women and Children) were more likely to

TABLE 1 Affiliation of StreetCred Client Population (*n* = 725)

Affiliation	<i>n</i> (%)
Health care–affiliated taxpayers	463 (64)
Patient	140 (19)
Patient and parent of pediatric patient(s)	93 (13)
Patient and employee	90 (12)
Employee	73 (10)
Patient, employee, and parent of pediatric patient(s)	37 (5)
Parent of pediatric patient(s)	26 (4)
Employee and parent of pediatric patient(s)	4 (1)
Nonaffiliated taxpayers	262 (36)

Missing data on 28 of 753 total clients; all missing data from 2017 is due to inconsistency in tax software reports.

serve families with children than community health centers (South End Community Health Center, Martha Eliot Health Center) (47%, 56%, 29%, and 29%, respectively; $P = .04$). The only significant difference at BMC between 2016 and 2017 was clients reporting ever using free tax preparation (45% vs 62%; $P = .04$). This increase may be attributable to repeat StreetCred clients; in 2017, 36% of those who had ever used free tax preparation used StreetCred in 2016 (data not shown).

Impact

Overall, clients received \$1 619 650 (\$401 275 in 2016; \$1 218 375 in 2017) in federal refunds with \$438 883 (\$96 209 in 2016; \$342 674 in 2017) from EITC (Table 3). StreetCred was associated with an additional 21% filing taxes compared with self-reported, previous year filing status (100% vs 79% [$P < .0001$]; Table 3).

StreetCred was associated with significantly increased knowledge and receipt of EITC. After using StreetCred, an additional 21% of clients knew about EITC compared with baseline (58% vs 37% [$P < .0001$] Table 3); 37% of clients received EITC compared with 23% of surveyed clients who reported “definitely” receiving it the previous year ($P < .0001$) Table 3. However, the rate of EITC receipt in the previous year likely exceeded 23%, because 26% were “not sure” of their EITC status. If we exclude those “not

sure,” the change in EITC receipt is nonsignificant ($P = .19$).

Additionally, StreetCred was associated with significant increase in access to free tax preparation services, with an additional 47% of clients receiving free tax preparation compared with the previous year (100% vs 53% [$P < .0001$] Table 3). Of the 50% of clients who reported barriers to free tax preparation, 73% were unaware free tax services existed. Of the 79% of clients who filed taxes in the previous year, 24% across both years paid for tax services, with fees ranging from \$30 to \$465 (Table 2). Notably, 39% paid to file taxes in the previous year in 2016 compared with 23% in 2017 ($P = .25$) (data not shown).

No significant differences in impact existed between families with children ≤ 18 years old and families without (Table 3).

Feasibility

Only 17% of surveyed clients in 2017 required >1 visit to complete tax returns (Table 3). No differences existed in feasibility between families with children and families without. Most visits were unrelated to medical care; only 10% reported scheduling a tax visit in conjunction with a medical appointment.

Most surveyed nonparticipants were eligible for the service but declined because they already filed taxes (62%); only 9% reported not needing to file.

All clinic staff survey respondents reported StreetCred’s services either did not impact (76%) or positively impacted (24%) their work. One stated, “many of our patients’ families struggle to make ends meet... which can have a negative impact on our pediatric patients... Anything to help alleviate that stress is a valuable part of our clinic.”

Acceptability

Services were highly acceptable to both clients and clinic staff. Of surveyed clients, 96% would use StreetCred again, and 96% rated overall tax services as “excellent” or “very good” (Table 3). Most clients “definitely” (59%) or “mostly” (22%) agreed StreetCred made them feel more connected to their doctor; pediatric families were significantly more likely to agree with this statement than families without children ($P = .02$; Table 3). No other differences existed in acceptability between families with children and families without. Most “definitely” or “mostly” agreed services were convenient (99%) and efficient (98%), volunteer tax preparers were trustworthy (100%) and knowledgeable (100%), and privacy was adequate (98%). One client found the service appealing “because it’s free, and you guys know what you all are doing. I have very limited funds.” Additionally, 64% of nonparticipants would consider using StreetCred in the future. Among clinic staff, 97% of respondents believed StreetCred was an appropriate, relevant service and should be continued (Table 3). Another staff member stated, “more money in parents’ pockets improves children’s health and reduces stress at home.”

DISCUSSION

StreetCred is a promising financial intervention. Given poverty’s negative impact on child health,

TABLE 2 Surveyed StreetCred Client Demographics and Previous Tax Filing Behavior

	All Clients	Clients With Children ≤18 y	Clients Without Children ≤18 y	<i>p</i> ^b
	<i>n</i> = 244	<i>n</i> = 98 ^a	<i>n</i> = 131 ^a	
	Mean (SD) or <i>n</i> (%)	Mean (SD) or <i>n</i> (%)	Mean (SD) or <i>n</i> (%)	
Demographics (<i>n</i>)				
Age in y (SD) (<i>n</i> = 235) ^c	37 (13)	36 (10)	38 (15)	.25
Race and/or ethnicity (<i>n</i> = 242) ^d	—	—	—	.02*
Black, non-Hispanic	110 (46%)	48 (50%)	55 (42%)	—
Hispanic	72 (30%)	30 (31%)	40 (31%)	—
White, non-Hispanic	32 (13%)	6 (6%)	24 (19%)	—
Asian	15 (6%)	5 (5%)	8 (6%)	—
Other	13 (5%)	8 (8%)	3 (2%)	—
Highest level of education completed (<i>n</i> = 243) ^e	—	—	—	<.01*
College degree or higher	96 (40%)	27 (27%)	65 (50%)	—
Some college or technical school	71 (29%)	36 (37%)	32 (25%)	—
High school graduate, GED, or Eq	56 (23%)	25 (26%)	24 (18%)	—
Did not complete high school	20 (8%)	10 (10%)	9 (7%)	—
Marital status (<i>n</i> = 243) ^e	—	—	—	.13
Single (living without partner)	184 (76%)	71 (73%)	103 (79%)	—
Married	29 (12%)	9 (9%)	17 (13%)	—
Divorced	19 (8%)	11 (11%)	6 (5%)	—
Widowed	2 (1%)	1 (1%)	1 (1%)	—
Living as a couple	9 (3%)	6 (6%)	3 (2%)	—
Primary language (<i>n</i> = 240) ^f	—	—	—	.39
English	175 (73%)	71 (75%)	95 (73%)	—
Spanish	33 (14%)	11 (12%)	20 (15%)	—
Haitian Creole	13 (5%)	8 (8%)	5 (4%)	—
Other	19 (8%)	5 (5%)	10 (8%)	—
Have children ≤18 y old (<i>n</i> = 229)	98 (43%)	—	—	—
Living in poverty in 2017 (<i>n</i> = 161) ^g	—	—	—	<.01*
Below the federal poverty line	65 (40%)	37 (54%)	26 (29%)	—
At or above the federal poverty line	96 (60%)	32 (46%)	64 (71%)	—
Previous tax preparation behavior and knowledge				
Filed taxes last y (<i>n</i> = 237) ^h	188 (79%)	74 (76%)	105 (82%)	.40
Paid to file taxes last y [amount range] (<i>n</i> = 188) ⁱ	57 (30%) [\$30, \$465]	26 (35%) [\$40, \$465]	28 (27%) [\$30, \$300]	.22
Ever used a free tax preparation service (<i>n</i> = 237) ^j	126 (53%)	48 (51%)	72 (56%)	.37
Experienced barriers to using free tax preparation services in the past	121 (50%)	45 (46%)	66 (50%)	.54
Specific barriers ^k	—	—	—	.35
Didn't know it existed	88 (73%)	33 (73%)	48 (73%)	—
Couldn't get there	3 (2%)	2 (5%)	1 (2%)	—
Couldn't go when it was open	6 (5%)	4 (9%)	2 (3%)	—
I prefer to use a paid service, or I don't need help with my taxes	8 (7%)	1 (2%)	5 (8%)	—
Other	22 (18%)	5 (11%)	11 (17%)	—
Ever heard of EITC (<i>n</i> = 238) ^l	89 (37%)	47 (48%)	39 (31%)	.03*
Received EITC last y (<i>n</i> = 236) ^m	—	—	—	<.01*
Yes	55 (23%)	37 (38%)	17 (14%)	—
No	119 (51%)	36 (37%)	75 (60%)	—
Not sure	62 (26%)	24 (25%)	33 (26%)	—

GED, general equivalency development; —, not applicable.

^a Could not stratify 15 surveys because of missing responses for number and/or age of children. Thus, numbers from clients with children and without children do not necessarily add up to the total number for all clients because of excluded surveys. Data from 2017 only consists of 80 surveys for clients with children and 111 surveys for clients without children.

^b *P* value compares results for clients with and without children ≤18 y old.

^c Missing response on 7 surveys for clients without children.

^d Missing response on 1 survey each for clients with and without children.

^e Missing response on 1 survey for a client without children.

^f Missing response on 3 surveys for clients with children and 1 survey for a client without children.

^g Not measured in 2016. Income was defined as money from a job, personal business, pensions, unemployment insurance, cash benefits from assistance programs, alimony, or child support. Federal poverty level in 2016: single person (\$11 880), family of 2 (\$16 020), family of 3 (\$20 160), family of 4 (\$24 300). Could not stratify 11 surveys because of missing responses for number and/or age of children. Thirty-two surveys were excluded (11 with children, 21 without children) because of missing or unsure income or missing family size.

^h Missing response on 1 survey for a client with children and 3 surveys for clients without children.

ⁱ Excluded participants who did not file taxes last year.

TABLE 2 Continued

^j Missing response on 3 surveys for clients with and without children.

^k Respondents could select ≥ 1 barrier.

^l Missing response on 5 surveys for clients without children.

^m Missing response on 1 survey for a client with children and on 6 surveys for clients without children.

* Denotes significant differences.

addressing financial stability of families should be a priority for pediatricians.²¹ Of the federal antipoverty programs, tax credits, including the EITC and child tax credit, impact child poverty rates most; the Supplemental Nutrition Assistance Program, housing subsidies, and Temporary Assistance for Needy Families, among others, are important but lift fewer children from poverty (supplemental poverty measure).^{23–26} Authors of some studies find the EITC’s antipoverty effect underestimated, because, in most analyses, the credit’s prowork effect is not accounted for.²⁷ Additionally, cash transfer programs like the EITC and Canadian Healthy Baby Prenatal Benefit improve maternal and infant health.^{8–10,28,29} Given these findings, alongside the knowledge that for-profit tax preparers target EITC-eligible families and 20% of eligible taxpayers miss out entirely, pediatricians have a unique opportunity to improve health by integrating financial interventions into medical homes. In our first 2 years, we returned \$1 619 650, including \$438 883 in EITC, to families. We reached a vulnerable population: 40% of surveyed clients and 54% of families with children ≤ 18 years old, were in poverty, which is markedly higher than national averages (14.8% and 17.6%, respectively).³ Notably, families with children ≤ 18 years old were significantly more likely to report StreetCred made them feel more connected to their doctor than those without ($P = .02$); emphasized in this difference is the potential bidirectional benefits of integrating tax preparation into pediatric clinics.

Using StreetCred was associated with increased filing rates, receipt of EITC, and use of free tax preparation, all of which increase money for low-income families. Additionally, there is concern about the accuracy of services provided by for-profit preparers. The Government Accountability Office estimates 60% of private-preparer returns have errors, compared with 6% of VITA returns.^{6,30}

Many free tax services exist through VITA, but half of our clients had never used them. Only 3% of EITC returns are prepared via VITA sites.³¹ We must better serve EITC-eligible families. StreetCred’s high acceptability provides evidence for a desired alternative of having tax services integrated into medical homes. Doctors’ offices are one of the only spaces all families with young children frequent.²² Anecdotally, we find families comfortable sharing their financial struggles when we introduce ourselves as a pediatrician-endorsed service.

Clinical services that are focused on social determinants of health are increasingly popular.^{32,33} Given limited time and space, we must prioritize services that families and staff find impactful. With our findings, we suggest StreetCred may be one such service. Not only did clients and clinic staff almost universally report acceptability, nonparticipants were interested in using it in the future. This highly acceptable service, measured both by self-report and by rate of return at BMC in 2017, served as both a community and pediatric-specific resource.

Whether referrals to free tax preparation services in the

community have similar impact is unknown. The data on screening and referral to outside services are mixed regarding whether patients connect.^{33–35} One specific reason may be that families prefer for-profit services like H&R Block for their professional, branded experience connoting trust and reliability.³⁶ Community VITA sites are often underfunded with limited hours, long lines, and unfamiliar locations. With StreetCred, we offer a nonprofit alternative fusing the benefits of typical VITA sites, like free services and knowledgeable staff, with the credibility and accessibility of for-profit businesses.

Lessons Learned

Notably, most surveyed clients in our pilot did not have young children. Only 40% of families surveyed had children ≤ 18 years old. Possible explanations include barriers parents face because of child care or single mothers more often living in families without an employed adult.³⁷ Additionally, given locations within clinics in which multigenerational patients are served, our services act as a community resource for low-income individuals of all family compositions. Not surprisingly, community health center sites were less likely to serve families with children than pediatric-specific sites, emphasizing the importance of prioritizing pediatric settings. Finally, despite direct advertising to families, recent feedback reveals that many need a more in-depth discussion to understand the service.

We are implementing changes to better reach families with young

TABLE 3 Impact, Feasibility, and Acceptability Measures for StreetCred

		All Clients or Respondents	Clients With Children ≤18 y <i>n</i> = 98 ^a	Clients Without Children ≤18 y <i>n</i> = 131 ^a	<i>P</i> ^b
		Mean (SD) or <i>n</i> (%)	<i>n</i> (%)	<i>n</i> (%)	
Impact					
Clients (<i>n</i> = 732) ^c	Total federal tax return: median [range] ^d	\$1172 [\$1, \$10 130]	—	—	N/A
	Received federal EITC	268 (37%)	—	—	N/A
	Total federal EITC (if received): median [range]	\$925 [\$2, \$6269]	—	—	N/A
Clients (<i>n</i> = 244 surveyed)	New tax filing (compared with previous y) (<i>n</i> = 237) ^e	49 (21%)	23 (24%)	23 (18%)	.29
	New to free tax preparation services (<i>n</i> = 237) ^f	111 (47%)	47 (49%)	56 (44%)	.39
	New knowledge of the EITC (<i>n</i> = 238) ^g	54 (23%)	28 (29%)	23 (18%)	.07
Feasibility					
Clients (<i>n</i> = 244 surveyed)	StreetCred tax filings completed in a single visit (<i>n</i> = 188; 2017 only) ^h	156 (83%)	66 (89%)	85 (82%)	.25
	Length of StreetCred visit <1 h (<i>n</i> = 224) ⁱ	77 (34%)	31 (34%)	42 (34%)	.96
Clinic staff (<i>n</i> = 38)	StreetCred impact on ability to do job and/or clinical work flow	—	—	—	N/A
	Very positively or positively	7 (18%)	—	—	—
	Did not impact	31 (82%)	—	—	—
	Very negatively or negatively	0 (0%)	—	—	—
Nonparticipants (<i>n</i> = 100)	Top reasons for declining StreetCred services (could endorse ≥1)	—	—	—	N/A
	I have already filed my taxes for a fee	57 (57%)	—	—	—
	I plan to prepare my own taxes	13 (13%)	—	—	—
	I plan to pay to prepare my taxes	10 (10%)	—	—	—
	I do not need to file	9 (9%)	—	—	—
	I plan to have my taxes prepared for free elsewhere	8 (8%)	—	—	—
	I have already filed my taxes for free	5 (5%)	—	—	—
Acceptability					
Clients (<i>n</i> = 244 surveyed)	Overall experience with tax services (<i>n</i> = 241) ^j	—	—	—	.35
	Excellent	205 (85%)	86 (90%)	106 (81%)	—
	Very good	27 (11%)	7 (7%)	18 (14%)	—
	Good	9 (4%)	3 (3%)	6 (5%)	—
	Interest in using StreetCred next y (<i>n</i> = 240) ^k	—	—	—	.63
	Yes	230 (96%)	92 (97%)	124 (95%)	—
	Not sure	8 (3%)	3 (3%)	4 (3%)	—
	No	2 (1%)	0 (0%)	2 (2%)	—
	Getting tax services done at my clinic or hospital makes me feel more connected to my doctor (<i>n</i> = 176; 2017 only) ^l	—	—	—	.02*
	Definitely agree	103 (58%)	44 (59%)	52 (58%)	—
	Mostly agree	38 (22%)	22 (29%)	13 (14%)	—
	Mostly disagree	23 (13%)	7 (9%)	15 (17%)	—
	Definitely disagree	12 (7%)	2 (3%)	10 (11%)	—
	Satisfied with the amount of time it took to do my taxes here (<i>n</i> = 237) ^{mm}	—	—	—	.87
	Definitely agree	202 (85%)	85 (88%)	105 (84%)	—
	Mostly agree	31 (13%)	11 (11%)	18 (14%)	—
	Mostly disagree	2 (1%)	1 (1%)	1 (1%)	—
	Definitely disagree	2 (1%)	0 (0%)	1 (1%)	—
	There was enough privacy where my taxes were prepared (<i>n</i> = 238) ⁿⁿ	—	—	—	.99
	Definitely agree	187 (79%)	75 (79%)	100 (78%)	—
	Mostly agree	45 (19%)	18 (19%)	25 (20%)	—
	Mostly disagree	5 (2%)	2 (2%)	3 (2%)	—
	Definitely disagree	1 (0%)	0 (0%)	0 (0%)	—

TABLE 3 Continued

	All Clients or Respondents	Clients With Children ≤18 y	Clients Without Children ≤18 y	P ^b
		n = 98 ^a	n = 131 ^a	
	Mean (SD) or n (%)	n (%)	n (%)	
There was enough privacy where my taxes were prepared (n = 238) ^{on}				.91
Definitely agree	210 (89%)	87 (90%)	111 (88%)	—
Mostly agree	24 (10%)	9 (9%)	14 (11%)	—
Mostly disagree	2 (1%)	1 (1%)	1 (1%)	—
Definitely disagree	1 (0%)	0 (0%)	0 (0%)	—
My tax preparers were knowledgeable about taxes (n = 238) ^{pp}				.64
Definitely agree	216 (91%)	88 (93%)	115 (90%)	—
Mostly agree	21 (9%)	7 (7%)	13 (10%)	—
Mostly disagree	0 (0%)	0 (0%)	0 (0%)	—
Definitely disagree	1 (0%)	0 (0%)	0 (0%)	—
I trust the tax preparers here (n = 240) ^q				.66
Definitely agree	215 (90%)	86 (89%)	116 (91%)	—
Mostly agree	24 (10%)	11 (11%)	12 (9%)	—
Mostly disagree	0 (0%)	0 (0%)	0 (0%)	—
Definitely disagree	1 (0%)	0 (0%)	0 (0%)	—
Nonparticipants (n = 100)	Interest in using StreetCred next y ^r	—	—	N/A
	Yes	64 (65%)	—	—
	Not sure	17 (17%)	—	—
	No	18 (18%)	—	—
Clinic staff (n = 38)	StreetCred is appropriate and relevant service for clinic families	37 (97%)	—	N/A
	StreetCred services should be provided for clinic families next y	37 (97%)	—	N/A

—, not applicable.

^a Could not stratify 15 surveys because of missing responses for number and/or age of children. Thus, numbers from clients with children and without children will not necessarily add up to the total number for all clients because of excluded surveys. Data from 2017 only consists of 80 surveys for clients with children and 111 surveys for clients without children.

^b P value compares results for clients with and without children ≤18 y old.

^c Missing data on 20 clients because of inconsistency in tax software reports.

^d Excludes returns in which clients owed taxes.

^e One hundred percent of clients filed taxes compared with clients who reported filing in the previous year (Table 2). Missing response on 1 survey for a client with children and 3 surveys for clients without children.

^f One hundred percent of clients received free tax preparation serviced compared with clients who reported ever using free tax preparation services in the past (Table 2). Missing response on 3 surveys each for clients with and without children.

^g Twenty-one percent responded “Yes, I learned about it today” when asked if they had heard for the EITC. Missing response on 5 surveys for clients without children.

^h Missing response on 6 surveys for clients with children and 7 for clients without children.

ⁱ Missing response on 7 surveys for clients with children and 9 surveys for clients without children.

^j Missing response on 2 surveys for clients with children and 1 survey for a client without children.

^k Missing response on 3 surveys for clients with children and 1 survey for a client without children.

^l Missing response on 5 surveys for clients with children and 21 surveys for clients without children.

^m Missing response on 1 survey for a client with children and 6 surveys for clients without children.

ⁿ Missing response on 3 surveys each for clients with and without children.

^o Missing response on 1 survey for clients with children and 5 surveys for clients without children.

^p Missing response on 3 surveys each for clients with and without children.

^q Missing response on 1 survey for a client with children and 3 surveys for clients without children.

^r Missing 1 response.

* Denotes significant differences.

children. To increase provider referral rates, we are piloting several interventions, such as advertising to families with wall posters in exam rooms, employing a provider incentive program, and using provider focus groups. To address competition with adults without children, we are reserving appointment slots for parents or caregivers of children.

Limitations

Convenience samples limit our findings’ generalizability because they may not represent all clients, nonparticipants, or staff. The independence of these anonymous surveys is unknown, which may confound results; the same respondent may have responded

to 2 years of client surveys or to a client and staff survey. Further, we were unable to calculate a response rate for client surveys because of variability in administration given program constraints; bias may be present if tax preparers differentially offered surveys to clients on the basis of unknown characteristics. Potential response

bias may also limit generalizability; participants who chose to respond may not be representative of the whole population. Data on previous-year EITC status may be subject to misclassification because recall bias may be present. The reported increased feeling of connection to the doctor after tax preparation is limited because we do not know if participants were referring to their or their children's doctor. Finally, we did not assess whether StreetCred has health impact or cost-effectiveness.

Future Directions

Given these encouraging findings, we will undertake a rigorous evaluation of the monies returned to families through StreetCred compared with the monies returned via usual tax preparation. Additionally, we

will evaluate whether integrating StreetCred into medical homes impacts health care use. Finally, we will test replicability by scaling to a variety of settings, including states outside Massachusetts, rural settings, and homeless shelters.

CONCLUSIONS

Integrating tax preparation into pediatric clinics to improve child health is a novel intervention. Similar to the initial expansions of Reach Out and Read and Medical Legal Partnership, StreetCred's expansion will depend on the early adapters of dedicated clinicians in safety net settings. VITA's national presence may contribute to scalability. As clinicians dedicated to improving children's health, we must financially empower our patients' families;

providing tax preparation services may be 1 approach.

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ABBREVIATIONS

BMC: Boston Medical Center
EITC: earned income tax credit
VITA: Volunteer Income Tax Assistance

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